



# PATENT SPECIFICATION

Application Date : July 28, 1922. No. 20,742/22.

183,848

Complete Accepted : July 26, 1923.

## COMPLETE SPECIFICATION.

### Improvements relating to Dough Moulding Machinery.

I, ISIDORE DE HAAN, a subject of the Queen of Holland, of No. 13, Den Texstraat, Amsterdam, Holland, Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to dough moulding machinery and more particularly to apparatus for rolling up flat rolled portions of dough in continuous succession. In apparatus of this kind it is known to employ pivoted dough curling members each of which extends across the whole breadth of the dough portion.

The present invention primarily consists in the provision of a number of independent pivoted hook members disposed side by side over the breadth of the dough portion, which, when the portion of dough passes, engage its forward edge and fold it over backwards.

The annexed drawing illustrates dough moulding apparatus constructed in accordance with my present invention.

Figure 1 shows in sectional elevation the conveyor for receiving the dough portions, and the means for rolling them.

Figure 2 is a detail view on an enlarged scale of a moulding board that may be used in my apparatus.

The apparatus according to this invention may be used in conjunction with any type of dough moulding machine. The moulding machine may, for example, comprise a series of rollers and a series of gripping devices for engaging the dough portions as they leave the rollers and depositing them on to folding members, said folding members being provided with bottom flaps through which the folded dough portions are discharged. Such bottom flaps as these are shown at 32, 32 in dotted lines in Figure 1 of the accompanying drawings.

According to the present invention

[Price 1/-]

dough portions are deposited upon a band conveyor 36 moving in the direction indicated by the arrow in Figure 1 which passes the dough beneath and in engagement with a vertically adjustable roller 45 adapted to exert pressure thereon, and subsequently beneath a plurality of inwardly bent hooks or fingers 46 pivoted on a transverse shaft 47. Said hooks are normally supported by a transverse bar 48, whereas their upward movement is limited by a second transverse bar 49, both said bars being mounted in such a manner that their vertical distance above the conveyor can be adjusted as circumstances may require. The hooks 46 are so formed that when they rest on bar 48 their inwardly bent points are adapted to centrally engage the front edge of the dough portion on the conveyor 36. Seeing that the dough is held in engagement with the conveyor 36 by the pressure roller 45 and the hooks have freedom of limited angular motion in upward direction, the action of the hooks is to upturn the front end of the dough, as shown in dotted lines.

The dough portion thus treated is passed by the band conveyor 36 beneath and in engagement with the bottom part of an endless belt 50 stretched around cylinders 51, 52 and driven by suitable means in the direction indicated by the arrow in Figure 1, it being understood, however, that the circumferential speed of conveyor 36 exceeds that of belt 50, the consequence being that the dough is now completely rolled. The rolled dough is then passed by the band conveyor 36 beneath and in engagement with a fixed moulding board 53 having a series of triangular projections 54 (see Figure 2) having their tops pointing in a direction opposite the direction of movement of the dough. By the action of these projections the central portion of the dough is somewhat restricted in cross sectional

Price 2/-

area whereby enlarged "heads" are formed.

5 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

10 1. In dough moulding machines, apparatus for rolling up the flat rolled portions of dough in continuous succession, characterised by a number of independent pivoted hook members disposed side by side over the breadth of the dough portion which, when the portion of dough  
15 passes, engage its forward edge and fold it over backwards.

2. Apparatus according to Claim 1, characterised by the fact that the hook members are pivotally suspended on an

axle arranged transversely of a conveyor band serving for the conveyance of the dough portions, and lie between adjustable stops for keeping said hook members at a distance from the conveyor band and restricting their upward tilting movement.

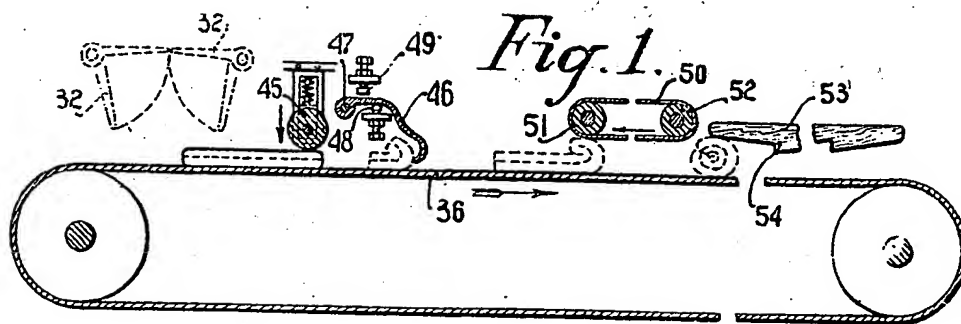
3. In dough moulding machinery, apparatus for rolling up flat rolled portions of dough in continuous succession substantially as described with reference 3 to the accompanying drawing.

Dated this 28th day of July, 1922.

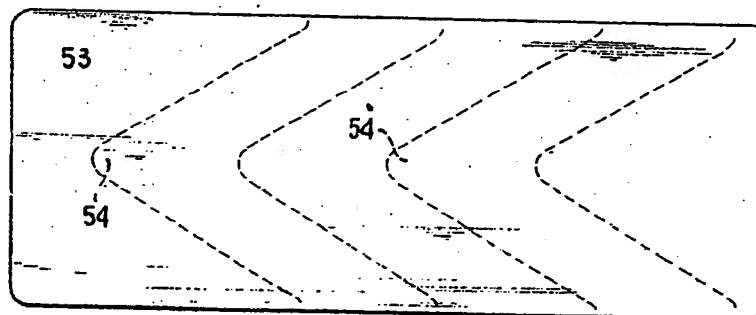
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Agents for the Applicant.

[This Drawing is a reproduction of the Original on a reduced scale.]



*Fig. 2.*



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